

Ser. No. 09/716,721
Internal Docket No. PU000125
Customer No. 24498

Listing and Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A serial compressed bus interface for interfacing with a bus having a single serial data line and at least one control line, comprising:

a serial-to-parallel converter having a data input coupled to said ~~signal~~ single serial data line and adapted to receive time-division multiplexed serial data from a plurality of data sources, said serial-to-parallel converter having a plurality of parallel output lines for providing thereon packets of said time-division multiplexed serial data in parallel form to a plurality of devices associated with data applications; and

enable logic having an input coupled to said at least one control line for receiving a data valid signal that identifies which of said plurality of devices is associated with a particular packet of the time-division multiplexed serial data, said enable logic deriving a signal from said data valid signal to enable said identified device to receive said particular packet in parallel form, as provided by said serial-to-parallel converter; and

a request control circuit adapted to output a request signal that requests said time-division multiplexed serial data for more than one but less than all of said plurality of devices.

2. (Cancelled)

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3. (Currently Amended) The serial compressed bus interface according to claim 1, ~~further comprising a request control circuit adapted to output at least one request signal that requests the time-division multiplexed serial data for at least one of the plurality of devices associated with data applications wherein said request signal requests said time-division multiplexed serial data from a single one of said plurality of data sources.~~

4. (Cancelled)

5. (Currently Amended) The serial compressed bus interface according to claim 3, wherein ~~the request control circuit is further adapted to encode the at least one request signal to correspond to more than one of the plurality of devices associated with data applications~~ said single one of said plurality of data sources is a single broadcast transponder.

6. (Currently Amended) A method for transmitting serial compressed data from a plurality of data sources via a bus having a single data line and at least one control line to a plurality of devices associated with data applications, comprising the steps of:

time-division multiplexing the serial compressed data from the plurality of data sources to generate time-division multiplexed serial compressed data comprising packets onto said single data line;

providing to said at least one control line at least one data valid signal that identifies which of said plurality of devices is associated with a particular one of said packets;

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converting said particular one of said packets to a packet of parallel data,
and outputting said packet of parallel data for receipt by said identified device;

receiving from said at least one control line said at least one data valid
signal; and

deriving a signal from said at least one data valid signal to enable said
identified device to receive said outputted packet of parallel data; and

providing a request signal that requests said time-division multiplexed
serial compressed data for more than one but less than all of said plurality of
devices.

7. (Cancelled)

8. (Currently Amended) The method according to claim 6, further
~~comprising the step of encoding a data valid signal to indicate that the time-
division multiplexed serial compressed data is valid for more than one of said
devices associated with data applications~~ wherein said request signal requests
said time-division multiplexed serial compressed data from a single one of said
plurality of data sources.

9. (Currently Amended) The method according to claim 6 ~~8~~, further
~~comprising the step of encoding a request signal to indicate that the time-division
multiplexed serial compressed data is requested by more than one of the devices
associated with data applications~~ wherein said single one of said plurality of data
sources is a single broadcast transponder.

10. (Cancelled)

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11. (New) The serial compressed bus interface according to claim 1, wherein said plurality of devices comprises a plurality of data buffers.

12. (New) The serial compressed bus interface according to claim 5, wherein said single broadcast transponder provides said requested time-division multiplexed serial data as a plurality of video channels.

13. (New) The serial compressed bus interface according to claim 12, wherein said video channels are simultaneously decoded.

14. (New) The method according to claim 6, wherein said plurality of devices comprises a plurality of data buffers.

15. (New) The method according to claim 9, wherein said single broadcast transponder provides said requested time-division multiplexed serial compressed data as a plurality of video channels.

16. (New) The method according to claim 15, wherein said video channels are simultaneously decoded.